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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,396	08/31/2000	Toshio Kobayashi		2870

7590

04/30/2003

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EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 04/30/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,396

Applicant(s)

ROBAYASHI ET AL.

Examiner

Elizabeth M Cole

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 373,974 to Manning et al in view of Adam et al, U.S. Patent No. 5,573,841, Greenway, U.S. Patent No. 5,281,461 and Benson et al, U.S. Patent No. 5,914,084. Manning et al discloses a method of making a nonwoven fabric comprising the steps of forming a slurry of pulp fibers and thermoplastic fibers, depositing the fibers to form a wet sheet and hydraulically entangling the fibers. The fibers may have the claimed dimensions and are present in the claimed proportions. A nonwoven fabric would inherently have apertures. Manning et al differs from the claimed invention because Manning et al does not disclose the weight percent of fibers in the slurry. Adam et al teaches that in forming a fibrous slurry that the slurry should contain about 0.01 to 1.5 percent by weight of fibers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the slurry of Manning et al so that it comprised 0.01 to 1.5 percent by weight of fibers. One of ordinary skill in the art would have been motivated to use to form the slurry so that it comprised 0.01 to 1.5 percent by weight of fibers because Adam teaches that this amount of fibers is conventional when forming a web by the wet-laid method. Neither Manning et al nor Adam et al teaches that the hydroentangling step should also form protuberances on the nonwoven fabric. Greenway et al teaches that hydroentangling a fibrous web against a support surface which has a plurality of conical protrusions produces a web which has a uniform and repeating pattern of nodes, (i.e., protrusions)

which also have a conical shape. See figs. 5A and 5 as well as fig 7. Also see col. 6, lines 43-50. Greenway et al teaches that such fabrics have more textile-like aesthetic properties. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have hydroentangled the web of Manning et al as taught by Greenway et al in order to both entangle and pattern the fibrous web. One of ordinary skill in the art would have been motivated to both entangle and pattern the fibrous web by the expectation that this would enhance the aesthetic properties of the nonwoven by making it appear more like a traditional textile fabric. Greenway does not disclose the use of a smooth roll and a patterned roll to form the embossments. Benson et al teaches that both either two patterned rolls may be used or a smooth roll and patterned roll may be used to emboss hydroentangled fabrics. See col. 9, lines 51-67. Therefore, Benson et al teaches that discloses that hydroentangled nonwovens may be embossed on rollers comprising one roll with protuberances and one smooth roll or else with two rolls with protuberances. Therefore, since Benson et al teaches that the two types of rolls are recognized as equivalents in the art it would have been obvious to have employed one smooth roll and one patterned roll to emboss the fabric of Greenway.

3. Applicant's arguments with respect to claims 4-5, 7-9 have been considered but are moot in view of the new ground(s) of rejection.
4. In view of Applicant's arguments, the 112 2nd paragraph rejection is withdrawn.
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c
April 28, 2003